

Alberta Sports Hall of Fame welcomes Horwood

Matt Gutsch

Don Horwood, who coached the University of Alberta Golden Bears basketball team for 26 years, has been announced as a member of the 2014 Alberta Sports Hall of Fame induction class.



Don Horwood

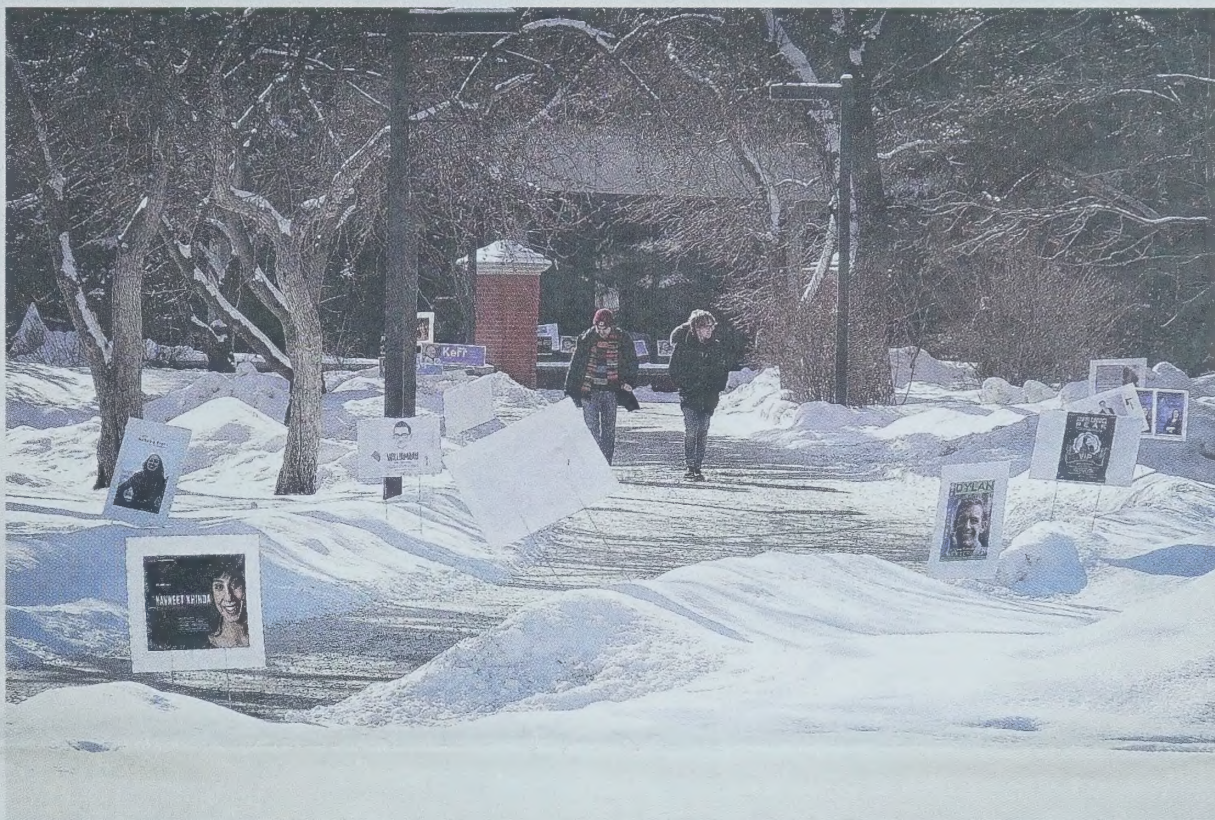
Horwood will be officially enshrined May 30 at the Alberta Sports Hall of Fame induction banquet, held annually in Red Deer.

Originally from Carbonear, N.L., Horwood served as Golden Bears head coach from 1983 to 2009, and in that time guided the U of A to three national championship titles (1994, 1995 and 2002), two silver medals and 15 national championship tournament appearances. His 313 regular-season wins is a Canada West record. During his tenure, the Golden Bears also amassed seven Canada West titles, and Horwood himself was a three-time national coach of the year.

Horwood guided the U of A to three national championship titles and was a three-time national coach of the year.

Recently inducted into the U of A Sports Wall of Fame (2013), Horwood was also named the Alberta Basketball Provincial Coach of the Year twice (1994 and 1995), and was given the City of Edmonton Salute to Excellence in 2007-08. ■

Election season



On March 6, Quad enjoyed a fresh blanket of snow and the latest round of Students' Union election signs.

Campus Alberta provincial grant remains unchanged

News Staff

The Government of Alberta Budget 2014 introduced on March 6 included no change to the base Campus Alberta grant, an announcement that the University of Alberta anticipated and prepared for in its draft institutional budget.

"We believe that strong investment in Alberta's post-secondary sector is critical to the future prosperity and social well-being of the province and Albertans," said U of A president Indira Samarasekera. "The University of Alberta is an important catalyst to prosperity and social innovation, through bold, creative research that solves economic and social problems; through outstanding teaching that prepares students for tomorrow's jobs and challenges; and through talented alumni who are already making their impact felt here and globally."

According to highlights listed on the Government of Alberta's website, the budget includes \$32.5 million in new money targeted specifically to opening up spaces for 2,000 new students across the province and stimulating collaboration throughout Campus Alberta.

Samarasekera said she and senior leadership will continue to work with government to ensure the university has the operational funding needed to fully sustain the institution's teaching and research-intensive enterprise. The U of A is also exploring new revenue streams that will help enable the institution to pursue excellence and compete with the best public universities in the world.

"We believe that strong investment in Alberta's post-secondary sector is critical to the future prosperity and social well-being of the province and Albertans."

Indira Samarasekera

Samarasekera reiterated her appreciation for new provincial funding sources announced earlier this week, such as the Social Innovation Endowment, for which she strongly advocated. Funds generated from the \$1-billion endowment

will go toward social science, humanities and fine arts research, knowledge application and creative activity, "significantly enhancing" our capacity to meet Alberta's social and cultural opportunities and challenges, she said.

The budget also outlines \$7 million in program funding each year over 10 years for the Peter Lougheed Leadership Initiative, a partnership between the U of A and The Banff Centre. Samarasekera called it a "significant investment" and good news for all U of A students.

The government's investment will be shared between the two partners. The U of A's component, the Peter Lougheed Leadership College, will give students access to new and enhanced leadership programming that reflects the diversity and strengths of the U of A, she added.

"This support enables us to proceed with the planning now underway, and over the coming months and years, build a pre-eminent leadership program that will inspire U of A students and alumni to the exemplary leadership once displayed by one of our most beloved alumni, Peter Lougheed."

Continued on page 3

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folio

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to remain on the mailing list.

Broadus Lecture to challenge empire with skin

Geoff McMaster

For most Edmontonians,
Klondike Kate is a kitschy
mascot for one of the city's
oldest summer fairs, a figure that,
since 1962, has helped bring the
K-Days gold-rush theme to life.



English professor Cecily Devereaux
lifts the veil on the subversive lives of
19th-century erotic dancers in this year's
Broadus Lectures.

And yet, as two-dimensional
as Kate might seem today, she
was based on a real erotic dancer,
Kathleen Rockwell, who made a
name for herself in the dance halls of
Dawson City, Yukon, at the end of
the 19th century.

When she left the Yukon to settle
in Oregon, she set out to deliberately
exploit her spicy Klondike celebrity,
printing matchbooks embossed with
her image and selling faux souvenirs
from Dawson City. She even bought
a car so she could ride in Klondike
nostalgia parades—all to nurture an
iconic image that would for a time
stake its claim in North American
popular culture.

Klondike Kate is just one erotic
dancer of the 19th and early 20th
centuries that Cecily Devereux will
examine in the Broadus Lectures,
an annual showcase of research in
the U of A's Department of English
and Film Studies. Her three talks
on March 10, 12 and 14 will look at
early erotic dance in North America
as "a spectacular display of skin in a
system that would grow to become
a multi-billion-dollar industry
and the contemporary culture of
'stripper chic.'"

What interests Devereux is the
alternatives these dancers provided
to educated, white, middle-class
women of the British Empire,
refusing to submit to the patriarchal
demands and gender expectations of
their time. Devereux's project began
when she noticed a pronounced
dearth of writing by women in the
archive—especially by those who

moved across national borders—be-
yond the narrowly circumscribed
boundaries of the conventional
travel narrative.

"You really begin to wonder,
where are the other people in
this imperial scene, the people
who aren't accounted for in that
record?" she says. "So I started
looking for them... sex workers
travelling with military groups, or
others not put into the record in
the same way as other legitimate or
respectable women.

"What I found is there are a lot
of women moving around the em-
pire in ways that are different from
other women, producing an idea of
femininity, especially white fem-
ininity, that isn't exactly the same
as the more familiar middle-class
traveller. They're travelling around
without the kind of identity that
gets put into a passport, and they're
often working outside the law,
and end up producing a different
idea of the empire itself, or at least
some different contours. And they
make themselves into these kind of
pseudonyms, into these icons."

“They challenged the
system at every level;
they challenged empire
as a structure, they
challenged nation as
a confining, restricting
boundary and they
challenged patriarchy in
the taking of their own
names and the way they
move into the world as
women, making very
clear their knowledge of
themselves as women.”

Cecily Devereaux

Lola Montez, for example, was
born Elisa Gilbert in Ireland but
for most of her life travelled around
in the guise of a Spanish dancer.
And the Toronto-born Beulah
Maude Durrant changed her name
to Maude Allen, travelled around
Europe and became famous for
her Dance of the Seven Veils and
her provocative version of Salomé,
based on the controversial play by
Oscar Wilde.



Kathleen Rockwell, alias Klondike Kate, gained fame as a burlesque dancer at the end of
the 19th century. She appears here in a 1900 act called "Searless and Rockwell."

The lives of these dancers were by
and large tragic, says Devereux, and
many ended up destitute. Klondike
Kate hooked up with a waiter,
Alexander Pantages, in the Yukon,
and with her own money helped him
establish a vaudeville theatre circuit
that would bring him enormous
fame and wealth. But Pantages left
Kate for another woman, and she
was crushed.

And in a published article called
"The Cult of the Clitoris," Allan
was accused by British MP Noel
Pemberton Billing of being a lesbian
German spy. Allan sued Billing for
criminal libel, launching a hugely
sensational trial, but in the end she
lost after being further accused of the
debased sexual acts evoked in Wilde's
play, including necrophilia.

Despite their sad circumstances,
however, these women were far from
mere victims, says Devereux. They
made deliberate, subversive choices
with their lives. While saddled with
illness, poverty and opprobrium,

they were at the same time "com-
pletely defiant."

"They challenged the system at
every level; they challenged empire
as a structure, they challenged
nation as a confining, restricting
boundary and they challenged
patriarchy in the taking of their own
names and the way they move into
the world as women, making very
clear their knowledge of themselves
as women."

In the end, however, it isn't so
much a thesis Devereux aims to
convey in her talks as a series of ques-
tions. The central query: "What hap-
pens in the Anglo-imperial context
that makes it worthwhile for women
to take their clothes off and dance?"

The Edmund Kemper Broadus
Lectures are held every year in hon-
our of the U of A's first English pro-
fessor, exploring current scholarship
in literary, cultural and film studies.

To view a promotional video on
Devereux's talk, go to [http://youtu.
be/o8wUFfkXuR1](http://youtu.be/o8wUFfkXuR1). ■

2014 Broadus Lectures

Professor Cecily Devereux will give a talk entitled *Empire's Skin Show: The
Business of Erotic Dance in the Long 19th Century*. These three lectures focus
on the emergence in 19th-century North America of the business of erotic
dance, the spectacular display of skin in a system that would grow to become
a multi-billion-dollar industry and the contemporary culture of "stripper chic."

March 10 – Instead of dance, they're doing ideology: Notes toward reading
a medium; March 12 – Body capital: Salome and the Head; March 14 – Mapping
the unsettler subject: Travels with Klondike Kate and other worldly women.
3:30–5 p.m. Lecture Theatre 1 Humanities Centre.

U of A alumnus donates \$5 million to medical programs

Folio Staff

An inspired past at the University of
Alberta has encouraged a former history
student to change the future of medicine
with a \$5-million bequest gift (donor's name
withheld by request).

The donor's remarkable personal history
includes writing dozens of publications and teach-
ing for more than 23 years at universities across
Canada including Waterloo, McGill and Western
Ontario. Still, the U of A left an impression.

"In 1960, I was invited by the head of history
at the U of A to complete a doctoral fellowship,
offered with funding," he said. He finished the pro-
gram in three years, a feat that may not have been
possible without financial support. "Giving back is a
debt of gratitude. I owe the University of Alberta

everything. I owe them my entire career. It really
feels like leaving a gift to family."

With such fond memories of a career teaching
history, it may seem odd that the donation has
been designated to the Faculty of Medicine &
Dentistry. "My father died when I was 20 years
old, and my uncle, a father figure, also died sev-
eral years later from cancer. I feel like the funds
will have a chance to make an impact and create
change in the medical field," he explained.

While the donation will fund an endowed chair
in medicine, specific research and program designa-
tions have been left to the discretion of the Faculty
of Medicine & Dentistry. "The impact of this sup-
port is monumental," said David Evans, vice-dean of
research in the faculty. "It allows our scientists and
clinicians to collaborate and leverage their strengths
to place laser focus on determining exactly what

cause of a disease needs to be attacked and overcome
in order to provide the best care for the patient."

“The impact of this support is
monumental.”

David Evans

But for the generous donor, the funds
shouldn't only create a brighter future in the field
of medicine: "I would like other University of
Alberta alumni to consider giving a bequest gift as
well, and together making a greater impact on the
next generation of graduates."

For more information on bequest giving,
please contact Michele Shea at 780-492-2394 or
michele.shea@ualberta.ca ■

Funds help measure the impact of community service-learning

Michael Brown

In annual surveys at the end of courses, students report that participating in the Community Service-Learning program enhances their learning.

However, little is known about the impact CSL has on students' future career and education plans—knowledge that could be useful in shaping course design and delivery, and bringing a little attention to a program that exists largely as the best-kept secret on campus.

To learn more about longer-term impacts of participation in curricular CSL on students across faculties, a fact-finding mission is underway thanks to a \$40,000 Teaching and Learning Enhancement Fund grant given to a team led by Alison Taylor early last year.

"We set out to learn more about the long-term impact of CSL on participants, and where the students would like to see more CSL," said Taylor, professor in the Department of Educational Policy Studies and director of the Community Service-Learning program.

Taylor and her team, which includes Mary Richards of Campus Saint-Jean, Zane

Hamm in the Faculty of Education, John Simpson in the Faculty of Arts and former U of A post-doctoral fellow Milosh Rakov, sent out invitations to more than 1,800 former CSL students dating back to 2005.

All told, 552 responded back. Of those, 438 participated in a CSL placement and 87 took a CSL course but did not opt for a community placement. "We wanted to be able to compare with students who don't have CSL experience."

The students were nearly unanimous in praise of their CSL experience: 98 per cent of former CSL students said participation in community organizations is important for overall social development. A similar majority also felt that CSL participation was important in developing their professional networks (94.9 per cent) and employability skills (95.9 per cent).



Alison Taylor

Scores for questions regarding recommending participation in CSL and impression as a learning strategy were just short of 90 per cent, and 94 per cent felt CSL contributed to an increased interest in community engagement.

"Typically, this is a group that is active in the community, but it was nice to see that almost a quarter of respondents continued to volunteer with their CSL partner organizations after their course ended," said Taylor. Overall, 89 per cent continued to volunteer in the community in some capacity.

The majority of respondents also felt strongly that their CSL experience prepared them for life beyond university by improving their teamwork and leadership skills.

Open-ended responses offered by participants showed a clear line between CSL placement and career path or degree chosen for some.

"It changed my degree and career path, and I'm now employed in the same capacity I completed my CSL in," wrote one respondent. Another said, "I was ready to leave my degree and take a year trying to figure what I wanted to do, when the CSL course helped make up my mind without having to leave my studies."

TLEF

Taylor said such strong testimonials are evidence that CSL is a valuable and rewarding piece of a student's education and can be a valuable tool in creating awareness of the program, which currently involves a small proportion of U of A students.

"CSL doesn't fit every course, but if students are saying CSL is valuable, maybe faculties will be more willing to listen to that," she said. "And from a student perspective, knowing what other students have said about CSL is valuable in helping them make up their own minds."

Taylor says she wishes every student could go the CSL route, and not just because it is a great way for students to see their education in action while paying tribute to their communities.

"CSL meets students' need to feel useful and develop networks, while giving them a bit more control over their own learning. And who knows, down the road it might be useful in helping students sort out what they want to do after university." ■

Endowments an investment in human prosperity

Folio Staff

Two new provincial investments in social and agricultural innovation provide an essential link to important research being done at the University of Alberta and to the future prosperity and well-being of all Albertans.

U of A President Indira Samarasekera applauded the creation of the Social Innovation Endowment and Agriculture and Food Innovation Endowment, both introduced in the Alberta legislature as cornerstone pieces of Bill 1. Samarasekera called both funds an investment in the kind of research that can improve how Albertans come together and build community, inspire creative works, solve social problems such as poverty and family violence, and generate future growth in Alberta's agriculture and food sectors.

"The establishment of new research funds affirms in very strong terms the value universities, like ours, bring to the communities that support us."

President Indira Samarasekera

"In today's knowledge economy, we know there is a critical need for individuals who are adept at finding and transforming knowledge into social innovations that can incite positive social, cultural, and political change across all sectors," said Samarasekera. "I applaud the Government of Alberta for showing such critical leadership—not only for creating the Social Innovation Fund, but also for funding it at a level commensurate with the importance of the work it will promote and support."

"The Agriculture and Food Innovation Endowment is also very good news and strong recognition of the role that research has historically played in the development of one of this province's most important industries."

Samarasekera called the \$1-billion Social Innovation Endowment—the largest in Canada—"truly extraordinary." It's the "third pillar" of research funding for which she has long advocated. It can do for the arts, social sciences and humanities what the Alberta Heritage Foundation for Medical Research Endowment has done for

advancing medical science and the health of Albertans, or what the Alberta Heritage Science and Engineering Research Endowment has meant for discoveries in those fields.

Lesley Cormack, dean of the Faculty of Arts, said the endowment is an exciting opportunity for her faculty, noting arts is a key player in addressing issues such as violence, discrimination, northern living and artistic expression.

"There's now an opportunity for our researchers to extend their reach and connect with Alberta's communities to deliver innovative solutions to some of the challenges facing the province and the world," Cormack said.

The \$200-million Agriculture and Food Innovation Endowment provides enhanced funding for basic and applied agricultural research, and supports value-added product development and commercialization.

John Kennelly, dean of the Faculty of Agricultural, Life and Environmental Sciences, said research shows investment in agriculture and food science guarantees high internal rates of return—generally exceeding costs by 10 to one or greater. U of A research in this area has had a direct impact on Albertans' quality of life, from rescuing the canola industry from ruin due to blackleg disease to breakthroughs in hybrid cattle breeding that have made Alberta a world leader in beef production.

"This new fund will enhance our ability to continue to provide solutions with our partners and generate economic opportunities and wealth for Alberta," Kennelly said.

Samarasekera said the U of A looks forward to further details about both endowments as Bill 1 proceeds in the legislature, and to working with Campus Alberta partners in advancing research and ideas that can benefit every corner of the province and beyond.

"The establishment of new research funds affirms in very strong terms the value universities, like ours, bring to the communities that support us." ■



President Indira Samarasekera

Alberta Budget 2014

Continued from page 1

Budget 2014-15 also included \$13 million to add a new Islamic garden to Devonian Botanic Gardens, which the university has been developing in partnership with His Highness, the Aga Khan.

Samarasekera said she will update the campus community in greater detail about the Comprehensive Institutional Plan and the 2014-15 institutional budget during a March 19 campus forum. The forum runs from 3 to 4 p.m. in L1-490 Edmonton Clinic Health Academy. ■



The provincial budget includes funding earmarked for 2,000 new full-time student spaces on Alberta campuses.

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Job shadowing sparks career potential

Bev Betkowski

For most students, Reading Week was a chance to take a break. But many at the University of Alberta spent the week learning one of life's biggest lessons—picking the line of work just right for them.

A record number of undergraduates, graduates, post-docs and even some alumni from various faculties took part in the CAPS: Your U of A Career Centre job shadow program, as it placed students into Edmonton workplaces to give them an idea of what kind of careers they'd find most fulfilling.

The job shadow program has grown steadily since it was launched by CAPS, from 62 pairings in 2011 to 233 this year, matched with 152 job hosts. The demand also hit a record of 475 student applications this year, reflecting the program's increasing popularity. A career centre jointly created by CAPS with the faculties of arts and science has also resulted in the highest-ever number of participating students from those areas, with 54 from arts and 52 from science.

"It tells us that students want to make meaningful connections as they decide on careers," said Joan Schiebelbein, director of CAPS. "This program really reflects the U of A values of discovery learning and about connecting communities, in a way that makes sense to students and to potential employers."

"That learning is very positive; it brings an awareness of themselves,

what drives them and what opportunities are available," she added.

Students like Lindsay Jessup spent a day with one or more workplace hosts, getting a feel for the work at hand. Jessup, a third-year sociology student in the Faculty of Arts, shadowed Mary Pat Barry, vice-president of communications for Alberta Innovates – Technology Futures.

“The growth in job shadow interest tells us that students want to make meaningful connections as they decide on careers.”

Joan Schiebelbein

Intrigued by the field of communications, Jessup leapt at the chance to shadow Barry, a U of A alumna from the Faculty of Extension. "It seemed like a good choice for someone who wants to work with people, and with my sociology background, it might make a great career for me."

Jessup spent a day with Barry, attending meetings that sparked her excitement as an arts student. "They really worked as a team, and I loved the creativity behind it; they put their own personalities into what they do. I've always had an organized, creative side. I like the fact that there's a job that is perfect for that."

Jessup now plans to focus the last two years of her studies on earning qualifications to apply to the U of A's Master of Arts in Communications and Technology (MACT) program, and in getting some writing published. She also plans to build her listening skills through volunteer work on campus.

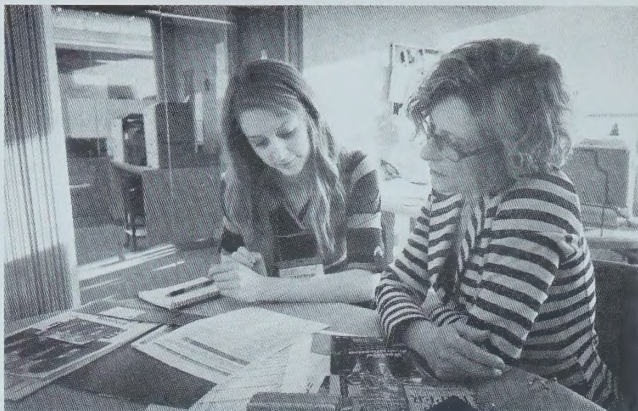
Barry, who holds a MACT degree, has hosted U of A students for a few years and sees the job shadow program as a stepping stone to strengthening Alberta's future.

"The University of Alberta has gone out of its way to find creative ways to link the students and their abilities to employers in Alberta, which is particularly important right now. We are trying to retain the best and brightest of Alberta graduates here. Alberta businesses need their skills and their enthusiasm. This is a perfect way to introduce them to the workplace and start to build a relationship. These students could very well be our employees of the future," she said.

Sharing her experience as a U of A alumna is especially rewarding, Barry added.

"Alumni know first-hand the benefit of a U of A degree, so it behooves us to give back. Through a program like CAPS, the university becomes a launch pad for the great things the students of today will make happen."

Alumni play a valuable part in helping students along in the self-discovery process when choosing a career path, Schiebelbein added. "Students like to hear how



Lindsay Jessup spent the day job shadowing Mary Pat Barry, vice-president of communications for Alberta Innovates – Technology Futures.

other people have done it. It has impact when they hear that directly from alumni."

To build on that engagement, CAPS created a career network to link with U of A alumni, build a forum and broaden connections in the working world.

The job shadow experience also creates some vital connections between U of A curriculum and emerging career areas, Schiebelbein noted.

"This year we had a placement with the City of Edmonton in urban planning, which coincides with things like the Planning Program jointly offered by the U of A's arts and science faculties." Other placements also happened in a mix of not-for-profit, public and private sectors including a bank, an animal shelter, a video game company and a government task force. ■

Royal Alexandra Hospital Foundation names first research chair in ophthalmology

Royal Alexandra Hospital Foundation Staff

The Royal Alexandra Hospital Foundation and the University of Alberta's Department of Ophthalmology and Visual Sciences announced the appointment of Ian MacDonald as the inaugural holder of the Royal Alexandra Hospital Foundation's Research Chair in Ophthalmology.

Funded by the Royal Alexandra Hospital Foundation, the new chair in ophthalmology is an endowment established to support ophthalmic research at the U of A and the Regional Eye Centre at the Royal Alexandra Hospital.

Thanks to community support and proceeds from the Full House Lottery, the \$3-million Research Chair in Ophthalmology will foster important research in various fields in ophthalmology. The chair will become an integral support for the research mission of the Department of Ophthalmology and Visual Sciences.

"Dr. MacDonald has a long and distinguished career and has been both a friend to our foundation and a mentor to many in the field of ophthalmology," said Andrew Otway, president and CEO of the Royal Alexandra Hospital Foundation. "He is the perfect fit for this position."

MacDonald has been the president of the Canadian Association of Pediatric Ophthalmologists and the Association of Canadian

University Professors of Ophthalmology. He is an editor emeritus of the Canadian Journal of Ophthalmology and currently serves on the editorial board of Survey of Ophthalmology and the American Journal of Ophthalmology for Genetics.

MacDonald's areas of interest are inherited ocular disorders, in particular, maculopathies and choroideremia. In 2009, in recognition of his work in Canada to foster the development of

academic ophthalmology, he was elected as a Fellow of the Canadian Academy of Health Sciences.

"We're very grateful for the tremendous support shown to the department from the Royal Alexandra Hospital Foundation," said MacDonald. "This important endowment will provide us with stable funding for our future research."

MacDonald plans to use the funds to support trainees who will be engaged in studies on the prevention of blindness, and, in particular, his efforts to build a centre for ocular gene therapy at the Regional Eye Centre.

The Regional Eye Centre at the Royal Alexandra Hospital plays a major role in eye health in Western Canada. Through its affiliation with the Department of Ophthalmology and Visual Sciences, the centre serves as a major teaching and research facility, serving patients from the Edmonton area, northern Alberta, northern B.C. and the Northwest Territories. ■

Amy Hewko

A new study from University of Alberta researchers suggests that patients, particularly women, with a history of kidney stones may be at a higher risk for stroke and heart attack.

The study, published in the *Clinical Journal of the American Society of Nephrology*, was led by Todd Alexander, associate professor of pediatrics and adjunct professor of physiology in the Faculty of Medicine & Dentistry.

The researchers analyzed information over 12 years from more than three million Canadian patients over the age of 18. Alexander compared the prevalence of heart attacks, stroke and artery bypass surgeries in patients who had a kidney stone with that among the rest of the population. Results showed that patients who had at least one kidney stone were significantly more likely to experience heart attack, stroke or artery bypass surgeries, regardless of age or other illness.

Women were particularly vulnerable: young women with a history of kidney stones were three times more likely to experience a heart-related complication.

"We were able to show that people who had kidney stones were more likely to get acute myocardial infarction [heart attacks], strokes and revascularization procedures," Alexander said.

The link may be life-altering for patients with a history of kidney stones because it offers an early indication that they should pay close attention to their heart health. High blood pressure is strongly tied to heart-related illnesses but, unless it has been previously diagnosed by a physician, patients are often unaware they have the condition. Kidney stones, on the other hand, are painful and require immediate medical attention.

"We call hypertension the silent killer," Alexander explained. "You're not aware you're hypertensive. Kidney stones are different; you're very aware you have a kidney stone. This is potentially a mechanism for one to be identified earlier for screening."



Todd Alexander led a study showing a link between kidney stones and heart problems, particularly for young women.

By being screened earlier, patients will be better equipped to control health indicators like blood pressure and cholesterol levels. This benefits the patient's health and eases cost to the health-care system for emergency procedures.

To reduce risk of developing kidney stones, physicians recommend drinking plenty of water, limiting salt intake, limiting soda intake and getting plenty of calcium. But can these habits potentially ward off a stroke or heart attack?

"I would like to think they do, but it's not known," Alexander said. "I don't think it's going to hurt. Less sodium will decrease your blood pressure and likely decrease your cardiovascular risk."

"Just because you have a kidney stone doesn't mean you're going to have a heart attack. Just because you don't have a kidney stone doesn't mean you won't. It's not a direct association; it's simply a marker of increased risk."

Alexander now hopes to confirm that the association between kidney stones and heart disease is causal. Pending the results of the secondary study, he would like to investigate whether expelling more calcium through urine decreases the cardiovascular risk. ■

ALES staff member recognized for outstanding service

staff spotlight

Elizabeth Ng

They call her “Golden Mama Bear.” Robin McClelland, graduate student service coordinator in the Department of Resource Economics and Environmental Sociology, won the Non-Academic Staff Award from the Graduate Students’ Association.

“I’m really so touched by this award,” said McClelland, who was nominated by REESSA, the department’s graduate student association.

McClelland takes care of the department’s 80-plus graduate students. She has developed an orientation package for the students’ first few weeks, makes sure they’re well funded and paid on time, keeps track

of every student’s academic requirements, alerts them to scholarship and grant opportunities, pushes for professional development and makes sure theses are completed properly.

“If I have something exciting or I’m in a little funk, I want to go see her. She’s just that person you go to—it’s almost a knee-jerk reaction for me.”

Amanda Long

“I do everything from recruitment to graduation and everything in between. My number

one concern is always the students,” explained McClelland.



Robin McClelland

But that’s only the administrative side of her work. Graduate student Amanda Long, a REESSA vice-president, says it’s McClelland’s personal touch that makes her a winner.

“If I have something exciting or I’m in a little funk, I want to go see her. She’s just that person you go to—it’s almost a knee-jerk reaction

for me. She never turns you away or asks if you can come back in five minutes. She gets so excited for us when we get job interviews or finish a thesis, but she’s also a shoulder to cry on,” said Long. “She always comes to our student social functions and she’s happy to be there.”

McClelland has been so important to some students that she’s been thanked in their thesis acknowledgements.

“They’re my kids—I call them my kids. Maybe that’s why they call me Golden Mama Bear,” said McClelland, laughing. “They come in and drop off treats for me; they

make my job easy. Hands down I have the best students on campus. But the best part of my job is seeing them graduate. Then I know I’ve done mine.”

McClelland’s talents will soon be available to more graduate students in the Faculty of Agricultural, Life and Environmental Sciences: she’s becoming one of two senior graduate student advisers for the entire faculty.

This is the second time McClelland has been recognized. In 2008, she received a Distinguished Service Award from the Faculty of ALES. ■

U of A partners to preserve access to Canada’s past

Lisa Bowker

A significant collection of more than 77,000 volumes of pre-1920 Canadian publications is now freely available online for anyone, anywhere in the world, thanks to a partnership between University of Alberta Libraries, the Canadian Research Knowledge Network (CRKN), Canadiana.org and the Internet Archive.

The Canadiana Collection comprises publications dating back to the early 17th century that are about Canada, or written and published by Canadians. Users can easily browse through the collection by topic: Arts and Literature, History and Geography, Religion, Science and Technology, and Social Science; and can then narrow their search by language, place, subject, and other filters.

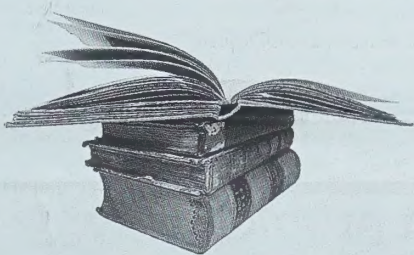
Highlights of the collection include books and other documents relating to Confederation, prohibition, popular medicine, immigration, statistics, the War of 1812, the First World War, Louis Riel and the building of Canada’s national railway.

The items in the collection were originally gathered by the Canadian Institute for Historical Microreproductions (CIHM) from collections across the country, then made available through libraries using the best technology of the day, microfiche. Now, high-quality digitization processes have breathed new life into these important historic materials.

A multi-year digitization effort was funded through the Canada Foundation for Innovation’s National Platforms Fund, with matching funds from 67 universities and provincial governments, in a project called

the Digital Content Infrastructure for the Human and Social Sciences (DCI) project managed by CRKN. Canadiana.org provided master copies of the microfiche, which the Internet Archive used for scanning on site at the U of A Libraries.

UNIVERSITY OF ALBERTA LIBRARIES
CANADIANA



The Canadiana Collection makes available 77,000 volumes of pre-1920 Canadian publications online.

“The University of Alberta Libraries is proud that this partnership enables everyone with an Internet connection to explore this incredible collection of Canadian culture online,” said Gerald Beasley, U of A chief librarian and vice-provost. “The CIHM Monograph Collection extends the scope of our well-known digitization program to a national level, supporting access to important works in our nation’s history.”

The collection is accessible at canadiana.library.ualberta.ca. ■

Are You a Winner?

Congratulations to Steven Sutphen, who won a copy of *The Remarkable Chester Ronning: Proud Son of China* by Brian Evans, professor emeritus in the Department of History and Classics, as part of Folio’s Feb. 21 “Are You a Winner?” contest. Sutphen was able to identify the Education North building’s larger-than-life mural titled *West and North* by former art professor Norman Yates. Up for grabs this week is a tried and true Butterdome butter dish. To win it, simply name the object in the photo and email your answer to folio@ualberta.ca by noon on Monday, March 17, and you will be entered into the draw.





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As this forum will occur mid-afternoon, I ask all managers and supervisors to allow interested staff to attend if possible.
For more information, please contact aubrey.chau@ualberta.ca or 780.492.1206.



“uplifting the whole people”
— JIMMY HARRIS, 1964

Water Week throws spotlight on U of A research excellence

Geoff McMaster

By any measure, Nick Ashbolt of the School of Public Health was a catch for the U of A and its marquee Water Initiative.

An expert in “next generational” municipal water services—including drinking water, waste water and storm water—Ashbolt came to the U of A last October from the University of New South Wales in Sydney, Australia, where he was head of the School of Civil and Environmental Engineering. He has also worked for the U.S. Environmental Protection Agency as a senior research microbiologist in the National Exposure Research Laboratory.

It’s probably fair to say few understand the water challenges faced by cities and towns better than Ashbolt does, so to call him a provincial asset is an understatement. He specializes in the health risks of chemicals and pathogens in municipal water, but is also keenly interested in water conservation and reuse, crucial strategies for our times as climate change will almost certainly increase drought and put pressure on water supplies already stressed by the demands of industry.

As distinguished as he is, Ashbolt is only one of more than 100 researchers at the U of A who are working to solve global water challenges in an ever more co-ordinated and multidisciplinary fashion under the university’s flagship *Water Initiative*. During Water Week this month, former director Greg Goss will outline some of the projects that make the U of A stand out in municipal water research, in a talk March 18 called “The Way We Green: Urban Water Challenges and Solutions for Sustainability.”

The challenges are complicated and varied, he says, but researchers

are focused on finding “innovative solutions, such as reuse of water in household and industrial sites, novel waste water and storm water management practices, detection of contaminants, and improved delivery and treatment practices for our water.”



Greg Goss

In the Alberta landscape, Calgary faces a more urgent challenge than does Edmonton, because the city is more prone to drought, which will only become more common in the future, says Goss.

“They’re going to have some serious stresses with growth. Edmonton won’t face the same stresses, but we are going to have a much drier climate according to current models, and we’re going to have much lower river flow.”

At the same time, Edmonton has to contend with flooding from time to time, which could also become more frequent as weather patterns change. And so researchers are working to improve the design, stability and management of storm water drains and pipes: “When we look at our precipitation patterns in 50 years, the infrastructure we’re installing now has to be expected to deal with that.”

But it’s not just scientists and engineers who have a role in solving these problems, says Goss.

The social sciences are also deeply involved, making sure any decisions we make now have a positive and cost-effective impact on our long-term quality of life, and that everyone—including Aboriginal communities—has access to safe, clean water.

One program called IC-IMPACTS—a partnership between the U of A and the universities of Toronto and British Columbia—is doing just that, working with native and rural communities in Alberta and India to ensure delivery of clean water. Researchers with IC-IMPACTS are developing advanced sensor systems and decision aids to improve the detection, prevention and management of infectious and water-borne illnesses. “The intent is to improve the lives of our neighbours in smaller communities,” says Goss.

Public education about water management is another important concern, says Goss. He points out, for example, that it makes little sense for Edmontonians to buy bottled drinking water when the city has one of the best water treatment facilities anywhere.

“We have to get people out there to recognize the quality of water we have from Epcor,” he says. “There are unfounded concerns about the current quality, and if you’re on limited resources and you’re spending money on bottled water and home water treatment, that impacts quality of life in the long run.”

So far, says Goss, the Water Initiative has made it easier for specialists in all of these fields to find each other and successfully apply for grants, as well as build bridges with municipalities responsible for meeting water management challenges head-on.

For more information on activities during Water Week, March 17–22, visit the Water Initiative website at water.ualberta.ca. ■

UAlberta Water Week March 17 – 23

MARCH 17 Water and Energy, A Panel Discussion. Patti LaBoucane Benson, Vic Adamowicz and Mohamed Gamal El Din. Maple Leaf Room, Lister Centre, Noon–2 p.m.

MARCH 18 Urban Water Challenges and Solutions for Sustainability. Greg Goss, professor in the Department of Biological Sciences, will give a talk on how cities are meeting the increased challenges of how to manage, treat and distribute water to both reduce cost and improve environmental performance. This talk will highlight some of the research projects that work to help improve urban water sustainability here and abroad. Noon–1 p.m. City Hall.

MARCH 19 Streams of Thought. An evening of interdisciplinary water research to showcase the breadth and scope of water work in Edmonton and promote collaboration across sectors. 5–9 p.m. PCL Lounge CSIS.

Experiments in Artistic Hydrology by Aaron Veldstra. This performance art project focuses on the definition of two words, remediation and sustainability, and how these words are used in relation to the resource industry. 5–9 p.m. PCL Lounge CSIS.

MARCH 20 Intimate Collaborations: Water and Body with Liz Ingram. Over the past 30 years, Ingram has been developing art works in printmaking and installation using images and the human body. This work is inspired by a long-lasting and ongoing relationship with an ecologically fragile site in Northern Alberta, Obed Lake. In this presentation, Ingram will focus on her most recent collaborations with her husband, Bernd Hildebrandt, and the intimate and inspiring collaboration with this particular piece of land and body of water. For more information on Liz Ingram and her art, visit www.lizingram.com. Noon–1 p.m., E1-103 ETLC.

Even the Rain (También la lluvia). A Spanish film crew goes to Bolivia to make a revisionist epic about the conquest of Latin America—on the cheap. But when riots break out in Cochabamba, protesting excessive fees for water, production is interrupted and the convictions of the crew members are challenged. With ample irony, *También la lluvia* explores the effects of Spanish imperialism, still resonating some 500 years later in the continued struggle against oppression by indigenous people. More at www.eventherainmovie.com. 5–7 p.m. 217/218 Telus Centre.

MARCH 22 UN Water Day is about what you will do in 2014 and beyond to promote sustainable practices in the realm of water and energy. The Water Initiative has expanded the celebration to a week of water activities.

A Celebration of the Athabasca. This will include a panel discussion entitled *Hydraulic Fracturing and In Situ Production* (1:30–3:30 p.m.) welcoming interchange between scientists and the public. Panel members include U of A professors Joel Gehman and Rick Chalaturnyk. 9:30 a.m.–4:30 p.m. Telus Centre.

Artist looks between the lines of oilsands sustainability, remediation

Michael Brown

At some point along the creative process, the waste left over from Aaron Veldstra’s various projects began to weigh on him.

“Through creating, I realized I was making all these buckets of dirty water and just pouring them down the sink. I sort of became uncomfortable with the fact that I was just pouring my waste down the sink and it was disappearing, making it someone else’s problem,” said the first-year master of fine arts student in the Department of Art and Design. “Out of sight, out of mind—I was basically pushing the problem to a different space so I didn’t have to see it anymore.”

Veldstra, who has spent a decade of summers in the reclamation industry as a tree planter, says his first instinct was to find a way to reclaim his waste water, an interesting process in its own right that engaged his artistic side further.

What has emerged is an early incarnation of a performance art project entitled *Experiments in Artistic Hydrology*, in which Veldstra attempts to engage people in a conversation about oil and the oil industry in Alberta using the concepts of remediation and sustainability



Aaron Veldstra will be performing March 19 as part of UAlberta Water Week 2014.

“These terms get thrown around quite a bit, but what do they really mean? That’s the question that I’m asking or provoking through these acts.

The acts in question start with Veldstra marking his wall-sized canvas—two sheets of drywall—with a series of lines representing geographical data sets, such as pipelines,

roads, cutlines and power lines, related to oil exploration and the resource industry in northern Alberta.

Then, Veldstra applies thick beads of black ink using a syringe to trace along the data set lines. The resulting lines and drips are then sponged off using a combination of water and baking soda.

“What I have is a bucket of dirty water, which I then filter using sand in a series of buckets,” said Veldstra, who models the filtration system after how most municipalities filter their citizens’ drinking water. “In the end, what I have is essentially clean water and a bunch of dirty sand.

“The end result is when you clean something, you always make something else dirty.”

Veldstra says the project isn’t solely a critique of remediation and sustainability of oil producers, but also our reliance on oil in general.

“We’re all implicated in our use of oil. It’s not specifically about oil companies, it’s about everybody: everybody wants to drive a car, everything we do involves oil in some way,” he said. “I’m using the oilsands as this contestable thing, but I’m not specifically talking about the giant holes we see north of Fort McMurray—it’s all of us.

“I’m just trying to broaden this conversation a little bit more, engage people through the act of doing something weird.”

Veldstra will be performing as part of UAlberta Water Week 2014 in the PCL Lounge of the Centennial Centre for Interdisciplinary Science March 19 from 5–9 p.m. ■

Water specialist keeps well-trained students flowing into industry

Michael Brown

If it turns out that the wars of the future will be fought over fresh water, Canada might not necessarily be the battleground that Canadians presumptuously think it is.

"We think in Canada we have lots of water, but some parts of Canada—including parts of southern Alberta—are experiencing drought conditions," said Mohamed Gamal El-Din, an environmental engineering researcher and a 2013-14 Killam Annual Professorship recipient. "It's critical that we are careful how we use our water, and when we use it, how we bring it back to the receiving environment in a safe manner."

Gamal El-Din has gained a level of acclaim for his innovations into how waste water is made safe, particularly in the area of tailings pond remediation.

His area of expertise has taken centre stage recently with word that oilsands giant Syncrude is starting down the path of reclaiming the first of Alberta's 77 square kilometres of tailings ponds. "They are going to see what comes out of current best practices in five years' time, but my feeling is it will require additional treatment—it looks like Mother Nature needs more time."

Gamal El-Din says if left long enough, perhaps a century, tailings ponds should attenuate naturally, but adds industry doesn't have that sort of time horizon, especially with concerns over the ever-increasing volumes being held.

To accelerate the natural remediation process at work, Gamal El-Din, who in 2010 was awarded the NSERC Senior Industrial Research Chair in Oil Sands Tailings Water Treatment, has provided important

advancements, particularly in the application of ozone treatment and different absorbents that span all possible water problems.

"My lab looks at many different options because our aim is to eventually have treatments for different scenarios; not all treatment processes will apply to all the different scenarios," he said.



Mohamed Gamal El-Din is a 2013-14 Killam Annual Professorship recipient.

When Gamal El-Din began as a PhD student in the late 1990s, his interests rested in municipal and industrial waste water treatment, with the latter focusing on pulp mill or animal manure treatment plants. It wasn't long before the water specialist-in-waiting took an interest in oilsands waste water, getting in on the ground floor of the School of Mining and Petroleum Engineering's burgeoning Environmental Engineering and Science Program.

"From his appointment as assistant professor immediately following conferral of his doctorate in 2001 to promotion as professor in the Department of Civil and Environmental Engineering seven years later, the Environmental Engineering Program has grown significantly alongside Mohamed," wrote department chair Roger Cheng in support of Gamal El-Din's Killam Annual Professorship. "The two are interwoven and have both matured with distinction to become renowned and respected."

His lab's successes, although groundbreaking, are exceeded by both his willingness to collaborate across disciplines and excitement around training the next generation of water protectors.

In the dozen years he's been at the university, Gamal El-Din has supervised more than 100 students at every level of their education including an astounding 51 master's students, 19 PhDs and 16 post-doctoral fellows. At any given time, his labs house a mixture of more than 30 students, technologists and research associates.

"When students leave here as practising environmental engineers, they are going to be working on a host of problems, so we might as well bring them up to speed about what the problems are that they will be facing," he said.

With a full lab and robust research interests, it is hard to imagine Gamal El-Din would have time for anything else, yet he is affiliated with more than a dozen professional groups and journals, is active on national and international committees, and has a commitment to volunteerism that is unsurpassed. Gamal El-Din exports his expertise to rural communities in his native Egypt and places like Bolivia, to help ensure the sustainability

Killam

of the world's drinking-water supply systems and the safety of sanitary systems.

Gamal El-Din is also an active member within the Faculty of Engineering and has supported the Women in Scholarship, Engineering, Science and Technology (WISEST) program by supervising high-school students interested in the discipline.

He is also one of the six team leads in the U of A-led Helmholtz-Alberta Initiative and has heavy involvement in the U of A Water Initiative, as a steering committee member and a major campus collaborator.

"To research water you have to use a multidisciplinary approach that ranges from engineering and the different sciences, to disciplines like public health and economics," he said. "The university has an excellent research climate and a lot of expertise in a wide range of areas to connect with and create some nice collaborations."

He adds the Office of the Vice-President Research has been instrumental in fostering this collegiality, as has the Faculty of Engineering.

"Since 2001 when I started, Dean Lynch has transformed the faculty. I have visited a lot of different universities, and I must say we have infrastructure here that is unequalled. Researchers who come to visit are amazed by my lab space, equipment and technical support."

"Not that I would ever leave, but the faculty has made it so I could never leave—I wouldn't want to lose all this." ■

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Students get a taste of rocket science

Richard Cairney

Two engineering students who took part in a rocket launch in Norway say the experience has enhanced their education and inspired them to pursue careers in aerospace engineering.

Alberto Palomino and Shawn Smith both took part in the Canada-Norway Sounding Rocket exchange program, travelling to the Andoya rocket range in Norway to learn about the engineering, technology and science behind rockets and to get hands-on experience and launch a rocket of their own.

The program accepts students from across Canada and Norway to study and work together for a week under the eye of staff at the Andoya range. Palomino and Smith, who were joined by U of A physics student Marc-Olivier Lajeunesse, say it didn't matter where students were from—they shared the same interests and worked well together. It helped that the Norwegians are fluent in English, but there's more to it than that, says Smith.

"It was we like were all following the student stereotypes," he said. "At lunch we'd start talking, and we'd end up in a conversation about string theory."

Palomino agrees that the atmosphere was welcoming.

"It was almost like we all could have been friends before we even got there," he said.

The engineering students were placed on the rocket physics team. Their job was to learn about the physics of rocketry, investigate the effects of wind on rockets and run a launch simulation. They also made a prediction about their rocket's flight path. Both students say the week of lectures and hands-on projects—including assembling and launching small rockets of their own—enriched their engineering education. Palomino and Smith are both in the third year of the mechanical engineering biomedical co-op program, and are also interested in aerospace engineering.

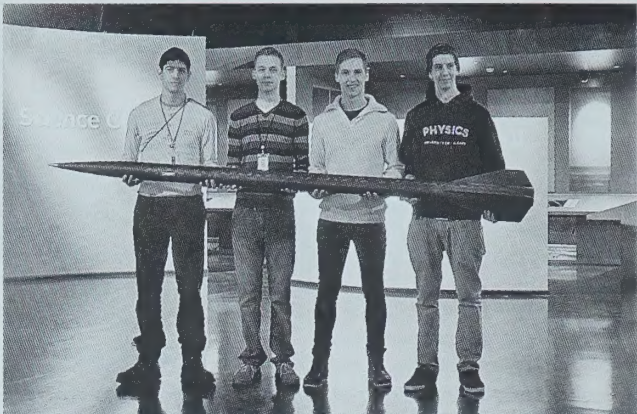
"I have a huge interest in the aerospace industry and it's something I want to do going forward," said Smith. "It's one of my interests; the other is biomedical engineering. There are some very specialized areas where the two overlap."

"Ever since I was a kid, one thing that has fascinated me is knowing how airplanes and rocket ships work," Palomino said. "It's an ongoing motivation to continue in engineering. The opportunity to learn more about space science was great. One thing they talked a lot about was the northern lights, and I learned a lot."

The international student team did manage to launch its rocket, a sounding rocket that stood more than eight feet tall on the launch pad and soared to an altitude of about eight kilometres at speeds approaching 2,200 km/h.

Watching the rocket take off—and understanding how it worked—wrapped up a fascinating week for the students.

"This was one of the most valuable, if not the most valuable experience I have had in the undergraduate program," said Palomino, "not only because of the hands-on work, but also because of the international experience. You get to see different cultures and meet students from around the world. We're very fortunate to have this experience."



Mechanical engineering students Alberto Palomino and Shawn Smith (left and second from left) with teammates at the Andoya Rocket Range

Team develops nano measuring spoon

Nicole Basaraba

University of Alberta researchers have developed a micro sensor that can analyze chemicals using a smaller volume of liquid than previously possible.

Faheem Khan and Seonghwan Kim, who work in a research team headed up by Thomas Thundat, Canada Excellence Research Chair in Oil Sands Molecular Engineering, developed a sensor called a bimetallic microchannel cantilever, which can measure the physical and chemical properties of different liquids in volumes that are only a few trillionths of a litre.

The device records heat generated by interaction with light with the liquid present inside a channel 25 times smaller than the width of a human hair. The sensor can also measure the weight of the liquid.

The sensor could become an essential tool for researchers working on lab-on-a-chip technology, which aims to bring different laboratory functions



Faheem Khan

onto a single chip. It has many applications, such as analyzing cellular contents of microalgae; testing for cancer by detecting circulating microvesicles shed from tumour cells; measuring the density, viscosity and chemical composition of oil; and characterizing liquid reagents in the pharmaceutical industry by consuming smaller volumes of drugs, which could help reduce research and development costs.

The sensor would be customized for each of the possible applications. For example, in pharmaceuticals, the instrument would likely sit on a table indoors, whereas for the petroleum industry, it would need to be a handheld device capable of functioning in sub-zero temperatures.

"The next step is to do more tests, to collaborate with biology and chemistry researchers to see its potential for rapid cancer detection," said Khan, who was lead author on the paper, published in the Royal Society of Chemistry journal *Lab on a Chip*. The U of A team is also collaborating with a team at the Technical University of Denmark headed by professor Anja Boisen.

"I'm also working on developing a startup company to market the bimetallic microchannel cantilever for commercial use," Khan said, noting that the ability to measure molecular properties of liquids at such a small scale can save pharmaceutical, oil, biomaterial and other industries large amounts of expensive chemicals.

Men's immunity could be key to new malaria drugs

Kate Toogood

University of Alberta researcher's discovery about how malaria affects men could mean the difference between life and death for pregnant women in Colombia.

Sedami Gnidehou began working on malaria diagnosis in 2011 when she joined Stephanie Yanow's laboratory as a research associate in the School of Public Health. They're now embarking on research that could provide a new vaccine strategy to protect pregnant women and their unborn children from malaria.

In a pilot study with collaborators in Colombia and Benin, Gnidehou discovered that men exposed to one species of malaria have antibodies that recognize another species that is highly dangerous to pregnant women. So a vaccine could protect against multiple species of malaria.

"Now, we need to confirm our observation using a large number of participants from across Colombia and Latin America," said Gnidehou. She hopes, within a year, to be well on the way to identifying new antigens that will contribute to a multivalent pregnancy vaccine. If



Sedami Gnidehou, research associate

successful, it will be the first of its kind to protect against multiple species of malaria.

"The impact of malaria is astonishing," she said. "Since more than 125 million pregnancies globally are threatened by malaria infection, a vaccine would be a game-changer."

"What will be interesting is to determine whether we can develop a vaccine that can protect pregnant women as well as non-pregnant people," said Gnidehou.

Gnidehou says the research could also have implications for people living in malaria-ridden areas around the world, and those who travel to these regions. According to the World

Health Organization, this could be as many as 3.3 billion people worldwide.

"With a vaccine, we can protect the health of people who live in high-risk areas, as well as those who travel to these parts of the world. This research has the potential to save lives through prevention of one of the biggest threats to health mankind has faced."

The research is funded by Grand Challenges Canada and the Canadian Institutes of Health Research. The researchers wish to acknowledge their partners at the Universidad de Antioquia, Colombia, and Institut de recherche pour le développement, Benin.

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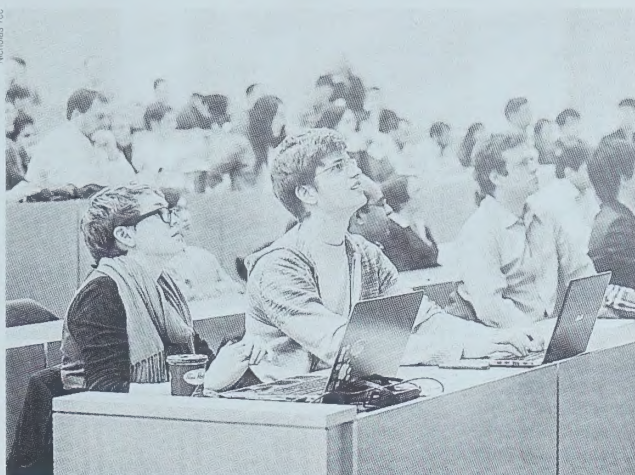
New program helps students capitalize on entrepreneurial dreams

Bryan Alary

As it is with many University of Alberta students at this time of year, it's crunch time for Adrienne Thomson. When she isn't nose-deep in a textbook learning about court life in imperial Japan some 800 years ago, she's rolling up her sleeves tackling another pressing project: launching a new business.

The third-year East Asian Studies major has her eyes on April for the launch of MiniPrivé, an online shopping website geared toward high-end contemporary kids' clothing. She hopes the venture proves two things: Canadians, and youth in particular, are underserved for online shopping options; and, when it comes to entrepreneurial thinking, your major doesn't matter.

"It's very different to switch off the arts mind and switch on the business mind, but it's something I have and I feel like other students have, too," said Thomson, who is launching MiniPrivé with friend



Students from across disciplines came together for the launch of Entrepreneurship 101, held Jan. 28.

Shyloe Feculak and fourth-year science student Jennifer Peters. "If you have an idea, there are huge opportunities at the U of A to gain support and connect with others; there are a lot of other people on campus who are trying to make their ideas a reality. Don't put yourself in a box."

On March 7, the U of A launched two new entrepreneurial initiatives, Entrepreneurship@UAlberta and eHUB, to help students like Thomson grow their ideas into thriving business ventures. It's all part of an effort to "catalyze" an ecosystem and culture of entrepreneurship and innovation

on campus—across disciplines, says Michael Lounsbury, who with Anthony Briggs and Qasim Rasi of the Alberta School of Business's Technology Commercialization Centre, is spearheading the initiative.

"Within Alberta, there is a strong level of support for entrepreneurship and innovation but it can be difficult to access, especially for young people starting out who might not know where to go for help," added Briggs. "Entrepreneurship@UAlberta leverages what we already do well at the U of A—our teaching and research in entrepreneurship and innovation—and links students to the mentorship, tools and resources they need to take their startup or idea to the next level."

Briggs co-wrote a recent study showing that U of A alumni collectively founded more than 70,000 organizations globally, a third of which were non-profit, or for-profit social, environmental or cultural organizations. Entrepreneurship@UAlberta is an important continuation of that work, he said. It not only supports entrepreneurial students in established programs like the MBA in innovation and entrepreneurship, but also gives students across campus access to new offerings like the undergraduate elective Entrepreneurship 101, and new post-graduate certificate and post-doctoral programs.

Although Entrepreneurship@UAlberta is driven by the business school, Briggs said it is a true campus-wide effort. It offers partnerships, networking opportunities and mentorship across disciplines and into the business community through organizations like TEC Edmonton, Startup Edmonton, Alberta Innovates Technology Futures, Microsoft Ventures and Capital Ideas.

Entrepreneurship@UAlberta has a physical space to call home in eHUB, located in HUB Mall. eHUB serves as a meeting space for students of all backgrounds to come together and collaborate on ideas, host talks and put on workshops related to entrepreneurship.

"When a student on campus is looking for a job, they go to CAPS. When they want to do a co-op program, they go to a co-op office," said

Qasim Rasi, eHUB director. "But what if they have a startup idea? What if they want to reach out to studying science or engineering? What if they want to build a startup team? By building this culture and this space, they know where to go."

"If you have an idea, there are huge opportunities at the U of A to gain support and connect with others."

Adrienne Thomson

Word already spread to computing science PhD student Kit Chen, who co-founded the startup Alieo Games, an online game that helps students in grades 3 to 6 improve their writing. With no prior business experience, Chen and her two partners found even the idea of writing a business plan daunting.

"None of us had started a business before and it really frightened us. We had an idea and we didn't know if it was commercially viable or how far we wanted to take it," she explained.

Alieo Games entered a local hackathon and business plan competition for startups, where Chen met Rasi, who put her in touch with TEC Edmonton and expertise in legal, accounting, marketing and other mentors, including other gaming companies.

"These people could be and are our competitors, but they're helping us because they know we're students and we're just starting out," she said. "It's been really good that way."

Briggs said the ultimate goal of Entrepreneurship@UAlberta is to give students the tools to become entrepreneurial thinkers and leaders, whether or not their startup idea takes off.

"By participating in Entrepreneurship@UAlberta, our students will learn how to become effective entrepreneurs. It doesn't matter what field they're going to end up working in; they're going to be agents of change, they're going to be agents of creativity, of innovation. They're going to be creating the jobs of tomorrow that will benefit all Albertans."

Heart failure unknowns impede health management

Bryan Alary

Al Brommeland found a true partner in his wife Florence. Through 57 years of marriage they've proved a formidable team, swinging and bowing at square dances, kicking up dust in their clogs, and now in their golden years, taking daily strolls side by side.



Partners in life and health: Al and Florence Brommeland have worked together to manage Al's congestive heart failure.

When Al started experiencing irregular heart rhythm 12 years ago, the couple worked together to stay healthy. It hasn't been easy, both in terms of symptoms—emergency doctors stopped and restarted Al's heart eight times over the years—or finding answers to their questions about how to best manage his illness, recently diagnosed as congestive heart failure.

"To me, it was anxious times," Al, 82, said of his frequent trips to emergency and the periods preceding when he waited for his heart beat to fall into rhythm. That meant a lot of time spent wondering what was going to happen next—at home or in emergency. "There was one case where we were in emergency for 11 hours—and that was in the waiting room."

According to University of Alberta research published in the journal *Heart*, patients with heart failure and their families often lack basic knowledge about the condition and how they should manage their care between doctor visits. A systematic review of 49 studies, involving more than 1,600 patients and their caregivers, showed that this lack of knowledge leads to confusion, delays in seeking help, and uncertainty about the long-term outlook and how to manage their own care.

"Heart failure decimates people's quality of life more than any medical condition. It's Canada's most costly, silent epidemic," said Alex Clark, associate dean of research in the Faculty of Nursing and the study's lead author. "It's the main reason seniors end up in the ER. Essentially, the research is showing people with heart failure are not doing the right things to take care of themselves."

Part of the problem, Clark explained, is heart failure is not well understood by many patients or their families. Heart failure is not a heart attack, though the latter can cause the condition. Heart failure refers to an overall decline in function in which blood flow can't meet the body's demands, a condition that afflicts 500,000 Canadians.

Symptoms vary from fatigue and shortness of breath to difficulty concentrating or elevated blood pressure. Someone with stage four heart failure can't walk across a room without being out of breath or work or get a good night's rest, Clark explained.

For the Brommelands, Al's low energy in the evening means he can't square dance or clog anymore. Managing his condition means tracking medical visits, following a strict no-salt diet and taking up to 10 medications and supplements, along with daily weigh-ins and checks for swelling in the leg—often a warning sign of irregular heartbeats—and regular calls for advice from the Heart Function Clinic at the Mazankowski Alberta Heart Institute.

Florence credits the clinic for turning Al's health around, finding answers to replace confusion.

"He saw a cardiologist once a year for a while, but there was a period of time where it was even less regular," said Florence. "For me, it was such a relief to be part of the Heart Function Clinic where you could phone someone, talk to someone, and that person knew exactly what was going on and could help you."

Clark said Alberta is generally doing a good job in helping patients manage their health compared with parts of Europe or the United States, but more can be done to include family members in care decisions and integrate services between cardiologists, pharmacists, family physicians and primary care networks. Hospitals can't possibly accommodate everyone with heart failure, he added, noting 50 per cent of seniors discharged from hospital return within a year.

"We need to do better in terms of giving them more support closer to home; that's more responsive to how they manage their condition."

Clark's research was funded by the Canadian Institutes of Health Research.

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news [shorts]

folio presents a sample of some of the stories that recently appeared on the ualberta.ca/news page. To read more, go to www.news.ualberta.ca.

Ukraine names U of A alum minister of foreign affairs

A University of Alberta alumnus is heading up Ukraine's Ministry of Foreign Affairs as acting foreign minister.

Andrii Deshchysia, who was appointed to the post Feb. 27, graduated from the U of A in 1995 with a master's degree in history. His master's thesis, written under the supervision of professor John-Paul Himka, was entitled, "The Rise of Multi-Party Systems in Poland and Ukraine." Before his tenure as a graduate student, Deshchysia held the Neporany Fellowship from the Canadian Foundation for Ukrainian Studies, administered by the Canadian Institute of Ukrainian Studies at the U of A.

After returning to Ukraine, Deshchysia began his career at the Ministry of Foreign Affairs, working first as press secretary and first secretary of Ukraine's embassy in Poland. From 1999 to 2001 he was senior co-ordinator of the Poland-America-Ukraine Cooperation Initiative in Ukraine. From 2001 to 2006 he worked as counsellor in Ukraine's embassy in Finland and then in Poland. From 2007 to 2012 he served as Ukraine's ambassador to Finland. Most recently, in 2013, he was posted to the Organization for Security and Co-operation in Europe as the chair's special representative for conflicts.

Bears basketball stars win Canada West awards

Fifth-year Golden Bears basketball forward Jordan Baker has been named the Canada West Player of the Year, and Mamadou Gueye has been chosen as the Canada West Rookie of the Year. Kenny Otieno also earned conference honours as the fourth-year guard was named to the Canada West second team all-star squad.

Baker earns the first Player of the Year recognition for Alberta since Alex Steele in 2007-08, and the fifth in program history. Gueye is the second consecutive Golden Bears rookie to earn the honour, following Youssef Ouahrig, and the fifth in program history.

Returning to the court after missing the second half of the 2013 season with a debilitating back injury, Baker rewrote the U of A record books, establishing himself as one of the greatest players in the history of Golden Bears basketball. By the end of the 2013-14 season, Baker owned 10 U of A career conference records, including most points (1,698), most rebounds (907), most assists (333) and most steals (200).

"Jordan has been improving all season long, a testament to his unbelievable work ethic and desire to be the best he can be," said Alberta head coach Barnaby Craddock. "Jordan has raised the level of play in the Canada West conference, and is an unbelievable ambassador for the University of Alberta as well as CIS basketball."

Gueye, who is originally from Quebec City, played in all 22 of Alberta's games, averaging 18.4 minutes per game, and was the third-highest scorer on the Bears roster.

"By working hard and buying into his role as a rookie, Mamadou has made a significant contribution to our team's success, while showing he has a very bright future ahead of him with the Golden Bears basketball program," said Craddock.

Mucha dons the Oil drop for NHL game

Fourth-year Golden Bears hockey goalie Kurtis Mucha suited up as the back-up goaltender for the Edmonton Oilers when they took on the Ottawa Senators Tuesday, March 3 at Rexall Place.

It was the second tour of NHL duty for Mucha, who hails from Sherwood Park, after he filled in for the Boston Bruins during their practice in Edmonton earlier this year.

Mucha had another strong season between the pipes for the top-ranked team in the nation. He was named a Canada West Second Team All-Star after a regular season in which he recorded a 14-1-1 record, as well as the second-best goals-against average (1.87) in the country. He also recorded three shutouts and a .909 save percentage this season.

Last season was also memorable for Mucha. He was awarded the CIS Goaltender of the Year award, became the first goaltender in Canada West history to be credited with a goal, and set a CIS record for consecutive shutouts with five. In fact, Mucha's shutout streak of 335 minutes and six seconds is the longest in modern-day play for the CIS, the WHL and the NHL.

ECHA recognized for building excellence

The U of A received two awards from the Building Owners and Managers Association of Edmonton for excellence in building management.

The Certification of Building Excellence award and the Outstanding Building of the Year (TOBY) award, announced at BOMA Edmonton's annual gala March 1, both went to the U of A's Edmonton Clinic Health Academy.

The TOBY award is the most prestigious and comprehensive program of its kind in the industry, recognizing quality in buildings and rewarding excellence in building management. Entries are judged on everything from community involvement to environmental and sustainability management.

With the award, the U of A qualifies for the national finals, to be held in Winnipeg this September at the Bomex conference.

Edwards named the West coach of the year

Matt Gutsch

Scott Edwards, head coach of the University of Alberta Pandas basketball team, has been named the Canada West Coach of the Year.

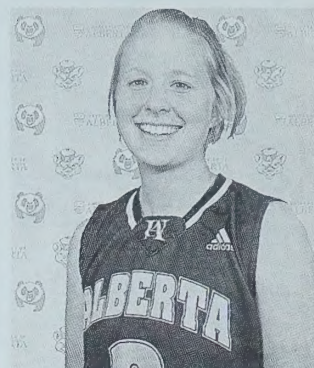
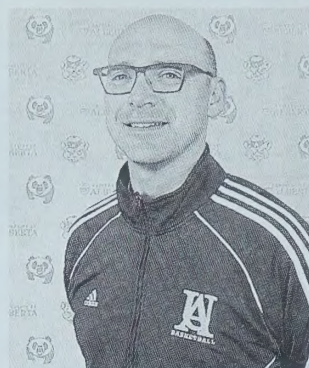
The full list of conference award winners and all-stars was announced March 5. Joining Edwards in receiving Canada West recognition were guard Jamie Norum, chosen as the Canada West nominee for the Tracy MacLeod award, and fifth-year forward Andria Carlyon, who earned first team all-star status.

For Edwards, it is the second time in his eight-year career that he has been named coach of the year. He guided the Pandas to a 20-2 regular season record in 2013-14, as well as a team-record 19 straight wins.

The native of Duncan, B.C., first won the coach of the year honour in his rookie season, 2006-07, the same year he took the Pandas to the CIS silver medal.

"Scott Edwards has done a tremendous job with the Pandas basketball program," noted U of A athletic director Ian Reade. "The Pandas set a team record with 19 consecutive wins, which is an outstanding accomplishment in a league with parity at the top, a significant amount of travel, and back-to-back games against the same opponent. All of these factors make a winning streak and a 20-2 season even more incredible."

Sophomore guard Jaime Norum, meanwhile, was named Canada West nominee for the Tracy MacLeod Award for the 2013-14 season.



Scott Edwards was named Canada West basketball coach of the year, and sophomore guard Jaime Norum was named Canada West nominee for the Tracy MacLeod Award.

Presented annually at the CIS women's basketball national championship awards banquet, the award is given to a student-athlete who displays incredible determination, perseverance and an unwavering spirit to continue playing the game of basketball.

In her second season of eligibility, but fourth with the team, Norum has been a living definition of the award criteria. In her debut CIS season (2010-11), the talented point guard from High River, Alta., blew out her knee in her first game and had to miss the remainder of the season. After a surgery and a long rehabilitation process, Norum was slated to return to the Pandas in 2012, but while travelling in Africa with Athletes in Action, a group committed to using sport and religion to change lives, Norum wrecked the same ligament in the same knee, forcing her to undergo more surgery and rehabilitation, and to miss the entire 2012-13 season as a result.

Finally, on the eve of her second comeback from debilitating knee

injuries, Norum had to contend with massive flooding in the summer of 2013 that ruined much of her family's home in southern Alberta.

But through it all, Norum's resolve and dedication never wavered. She finally stepped on the court with her Pandas teammates in the fall of 2013 for her first CIS game in three years. She ended up playing in 18 regular season games for Alberta in 2013-14, as well as two playoff games so far.

She is the just the second member of the Pandas program to be nominated for the award, and the first since 2011.

"Everyone involved with Pandas basketball is thrilled for Jaime" said Pandas head coach Scott Edwards. "Having been there to see the toughest of times for this young athlete, we are inspired every day by her perseverance, work ethic and attitude. The impact she has had on our program cannot be measured. She challenges everyone involved with this program to be a better athlete, student and person." ■

laurels

Jie Chen, professor in the Department of Electrical and Computer Engineering; Sushanta Mitra, professor in the Department of Mechanical Engineering; and Ward Wilson, professor in the Department of Civil and Environmental Engineering, were named Fellows of the Engineering Institute of Canada for their exceptional contributions to engineering in Canada.

Joanne Olson, professor in the Faculty of Nursing, was named a Fellow of the American Academy of Nursing, for her significant contributions to nursing and health care.

Joanne Profetto-McGrath, acting dean of the Faculty of Nursing, received the Pat Griffin Nursing Education Research Scholar Award from the Canadian Association of Schools of Nursing for exemplary research in nursing education through inquiry, mentorship and dissemination.

Vic Adamowicz, researcher in the Department of Resource Economics and Environmental Sociology, was elected president of the Association of Environmental and Resource Economists. Founded in 1979, the association was the first organization to represent the discipline of environmental economics. Its main aim is the promotion of ideas, world scholarship and research.

The international Council for Canadian Studies has awarded Claude Couture, professor at Campus Saint-Jean, the Governor General's International Award for Canadian Studies. This distinction is the most prestigious award in Canadian studies, and is presented each year to a scholar who has played an extraordinary role in the development of Canadian studies internationally.

At a recent consultation meeting with the Council of Ministers of Education, Canada, the China Scholarship Council (CSC) announced that the U of A is ranked number one in the world in terms of hosting CSC scholars and students.

classified ads

ACCOMMODATIONS WANTED

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GOODS FOR SALE

CRAFT SALE. Friday, March 14, 2014, 4:00 p.m. - 9:00 p.m. and Saturday, March 15, 2014, 10:00 a.m. - 4:00 p.m. At the Nomads Tent, Mckernan Community Hall, 11431 - 78 Avenue. Jewelry, Indian Cottons and silks, henna hand

painting and book readings by local authors (e.g. 40 Below). In the adjacent hall, on Friday night, the international Folk Dancers will welcome newcomers to watch or participate.

MISCELLANEOUS

STAMP SHOW. Edmonton Stamp Club, March 22 - 23, Saturday 10 - 5, Sunday 10 - 4. New location, Central Lion's Center, 113 Street and 111 Avenue. Stamps for sale, exhibits, Jr. Table. Free Admission. www.Edmontonstampclub.com.

Big surge in designer drugs and tainted 'E' pose lethal risks

Bryan Alary

In the span of a decade, Canada has gone from ecstasy importer to global supplier of the illegal party drug. At the same time, even newer designer highs—sometimes just a mouse-click away—are flooding the drug market faster than legislation can keep pace.

It's a worrying problem that University of Alberta researchers say requires more education to help Canadians understand the very real, deadly risks of designer drug use.

"The chemists who are making these drugs are coming up with about 10 new drugs per year; the legislation cannot keep up with the market," said Alan Hudson, a pharmacologist at the U of A who studies how ecstasy and other drugs affect brain neurochemistry. "The best way forward is to educate people that they're playing Russian roulette—the health risks from taking these drugs are high, and potentially lethal."

In a new paper published in *Drug Science, Policy and Law*, Hudson and his U of A co-authors—Maggie Lalies, Glen Baker, Kris Wells and Katherine Aitchison—warn the

recreational drug scene is growing in Canada, fuelled by an appetite for designer drugs and legal highs.

"This is a pressing public health issue," said Wells, director of programs and services with the Institute for Sexual Minority Studies and Services. "The profile that we're seeing of someone taking ecstasy or these so-called recreational drugs is not perhaps your average user when we think of drug use. It could be one of our own university students going to a party on the weekend—where they haven't experimented before—and then take a tablet of ecstasy. It doesn't have an effect and they take another one; pretty soon they're in emergency fighting for their life."

Newer designer drugs, often purchased online from Asia, can represent big business in Canada.

"For some of these legal highs, you only need a milligram to get high," Hudson said. "If you can buy a kilogram for \$200, the markup can be huge."

Although Health Canada statistics show ecstasy use is down slightly among young people across the country, a 2006 report from the RCMP shows Canada has become a

"major production and export country," a situation that developed over



Pharmacologist Alan Hudson studies how ecstasy and newer designer drugs affect neurochemistry in the brain.

two years and a significant departure from the mid-1990s, when Canada was an import-consumer nation.

During the same time, Hudson notes, ecstasy has become increasingly toxic, cut with a mix of, at times, deadly chemicals. In a 2007 Health Canada study, only three per cent of seized ecstasy tablets contained pure MDMA, the drug's main ingredient, compared with 69 per cent in 2001.

Two such contaminants are PMA and PMMA; the latter may

cause severe serotonin toxicity and has been linked to as many as eight deaths in Alberta over the past two years. Hudson and his colleagues caution that even pure ecstasy can have toxic side-effects that vary by individual, due to genetic factors. "There is no safe dose of ecstasy."

Head shops and online operators have increasingly turned to peddling legal highs such as BZP and TFMPP, often sold as "party pills," "Barts" or "Homers" named for shapes resembling characters from the Simpsons TV show. Both ingredients were declared illegal in 2012, but have given way in popularity to newer drugs such as "plant food" or bath salts, which have been sold legally as variants of mephedrone, methylene and MDPV—the latter of which is known for inducing a "zombie-like" state and paranoia.

The federal government banned the drug, but Hudson said there will always be others like Benzo fury and online options to take their place.

In an effort to raise awareness, the research team has forged relationships with the Edmonton Police Service and various community groups.

Wells co-chairs the Chief's Advisory Council, a role that helped facilitate access to newer drugs for research, and his work at iSMSS puts him in constant contact with at-risk youth. Sexual and gender minority youth are three times as likely to take drugs and alcohol as negative coping mechanisms, he said, which underscores the importance of creating positive environments that help youth feel supported.

"It's about taking the research to the next level—communicating it, mobilizing the knowledge to stakeholders and, ultimately, to all those young people who may be facing a choice in their lives," Wells said.

When youth do turn to drugs, Hudson said, parents can turn to resources offered by Alberta Health Services and look for signs such as depressed moods after the weekend; mood changes, often associated with drugs such as K2 or spice; and sudden nosebleeds, from snorting designer drugs such as plant food.

This U of A research was funded by the Canadian Institutes of Health Research and the Government of Alberta. ■

talks & events

Talks & Events listings do not accept submissions via fax, mail, email or phone. Please enter events you'd like to appear in *folio* and at www.news.ualberta.ca/events. A more comprehensive list of events is available online at www.events.ualberta.ca. Deadline: noon one week prior to publication. Entries will be edited for style and length.

UNTIL MARCH 29

And there's the humor of it: Shakespeare and the Four Humors. Come see this exhibit that explores the links between Shakespeare's work and the history of science and medicine. John W. Scott Health Sciences Library.

UNTIL MARCH 23

Printed Matter: Current Positions in Austrian Printmaking. Exhibit shows how the media, technique and theme of the art works of eight contemporary Austrian print-artists vary, thus providing a valuable snapshot of current Austrian printmaking. FAB Gallery.

MARCH 9

Symphony Sunday for Kids: Mozart's Magnificent Voyage. This family-friendly orchestral performance combines actors and musical storytelling and will have your children learning, laughing, and leaping in surprise. More at alumni.ualberta.ca/events/alberta/symphony. 2–5 p.m. Jack Singer Concert Hall.

MARCH 10

Talk by Alison Taylor, director of Community Service Learning. Noon–1 p.m. 4488 Law Centre.

History under Redevelopment: Reflections on the State and the Politics of Representation in Post-Socialist Poland. Jaro Stacul, research associate in the Wirth Institute, will give this lecture. 2–3 p.m. Chamber, Arts & Convocation Hall.

MARCH 11

WLF event: Forum on Men and Feminism. Speakers include Lise Gotell, chair of Women's and Gender Studies; Gil McGowan, president of the Alberta Federation of Labour; Barret Weber, instructor in the Department of Sociology; with Elisabeth Ballermann, president of the Health Sciences Association of Alberta acting as MC. RSVP to edmonton@leaf.ca. 7–8 p.m. 237 Law Centre.

MARCH 12

Addressing Conflict in Graduate Supervision. Naomi Krogman, 2012–2013 Provost's Fellow, and Jayson MacLean, graduate ombudsperson with Student OmbudService, will lead discussion around best practices in graduate student supervision and to reflect upon their own approaches to communication and conflict management. 11:30–1 p.m. 236/238 Telus Centre.

Educated Luncheon – Shaping a Green Future: Tapping Geothermal Energy. Inga Moeck, Campus Alberta Innovation Program Chair in the Department of Earth and Atmospheric Sciences will talk about Geothermal energy can help diversify our energy future to meet growing global energy demand while treading lightly on the environment. Join Professor Inga Moeck to learn about exciting geothermal research being conducted at the U of A and envision a greener future. \$10 (includes lunch). 12–1 p.m. Enterprise Square.

MARCH 13

Ten Things I Hate About You Film Screening. Drama professor David Ley will lead discussion about the film. 6–9 p.m. Bernard Snell Hall, Walter McKenzie Centre.

Educated Palate – Sustainably Noorished. The U of A Alumni Association and Campus Sustainability present the Educated Palate at the alumni owned, Noorish Concious Eatery & Superfood Elixir bar. \$25 (includes meal and a non-alcoholic beverage) 6 p.m. Noorish Concious Eatery, 8440 109th.

Brain Awareness Week Public Lecture. Listen to a panel of experts from the Edmonton community discuss the role of traumatic brain injury in our society. Speakers include Ibolja Cernak, Chair of Military and Veterans' Clinical Rehabilitation Research and Professor at the Faculty of Rehabilitation Medicine; Garnet Cummings, former head of the Emergency Department at the Royal Alexandra Hospital and executive director of the Brain Care Centre; Dhiren Naidu, associate professor in the Division of Physical Medicine and Rehabilitation and team physician with the Edmonton Oilers, Edmonton Eskimos and the U of A Golden Bears Football Team; and Ryan King, long snapper for the Edmonton Eskimos. 7–10 p.m. Allard Family Lecture Theatre, Katz Group Building.

Deadline for entry into "What does the Faculty of Physical Education and Recreation mean to me?" contest. Just answer how university programs help you stay active on campus in less than 120 seconds. Winner or winners of this competition will receive a 16 GB iPad mini. More at www.physedandrec.ualberta.ca/Events/Video%20Contest.aspx.

MARCH 16

Mainstage: Percussive Winds. The Symphonic Wind Ensemble and Concert Band with guest

percussion soloist Matthew Coley, lecturer of percussion at Iowa State University, perform the Canadian premiere of Glass House Concerto by Andrew Ardizzoia. \$20 adults, \$15 seniors and \$10 students. 3–5 p.m. Winspear Centre. Tickets available through yeglive.ca/ualbertamusic.

MARCH 18

Diversity in the classroom: Using Universal Design for Learning to Benefit All Students. Kim Peacock and Natasja Saranchuk with the Centre for Teaching and Learning will lead a discussion about Universal Design for Learning, which is a set of principles and techniques that focus on increasing accessibility to course material for all students. This session will provide you with the tools to set clear goals, provide multiple opportunities for students to engage in learning, and assess progress often. Go to ctl.ualberta.ca to register. Noon–1 p.m. 217/219 Telus Centre.

MARCH 19

TransCanada Chair Lecture Series talk. Rowland Harrison, TransCanada Chair in Administrative and Regulatory Law, will be giving a talk entitled Northern Gateway – So Far! The Joint Review Panel for the Enbridge Northern Gateway Project has recommended approval of perhaps the most controversial pipeline project in Canadian history. The recent release of the Panel Report was, however, just the first step in a new regulatory process. The lecture will review the Panel Report, which will likely prove to be a watershed moment in the history of Canada's federal pipeline regulation regime and discuss the process for next steps. Noon–1 p.m. 101 Law Centre.

Cheese Tasting. Enjoy an evening at the Faculty Club, which is now offering memberships to alumni, and learn about cheese from one of the world's most recognized experts, U of A professor emeritus Pavel Jelen. \$10. 4:30 p.m. Faculty Club 11435 Saskatchewan Drive.

MARCH 20

Managing Diversity in the Classroom. Wade King, safe disclosure and human rights advisor, and Catherine Anley, employment equity advisor, will facilitate a discussion about how different cultural orientations can impact communication and engagement. Register at www.ctl.ualberta.ca. 10–11:30 a.m. L1 420 ECHA.

Even the Rain (También la lluvia). Spanish film crew goes to Bolivia to make a revisionist epic about the conquest of Latin America—on the cheap. But when riots break out in Cochabamba, protesting excessive fees for water, production is interrupted and the convictions of the crewmembers are challenged. With ample irony, *También la lluvia* explores the effects of Spanish imperialism, still resonating some 500 years later in the continued struggle against oppression by indigenous people. More at www.eventherainmovie.com. 5–7 p.m. 217/218 Telus Centre.

Sixth Annual Dr. Olive Yonge Teaching & Learning Scholarship Day. The Dr. Olive Yonge Teaching and Learning Scholarship Day is in honour of an exceptional teacher and scholar, Dr. Olive Yonge, from the Faculty of Nursing, and is in recognition of her outstanding contribution to the discipline and profession of nursing. More at www.cvent.com/d/4cq6ft/1Q. 8–4:30 p.m. Lister Centre.

MARCH 22

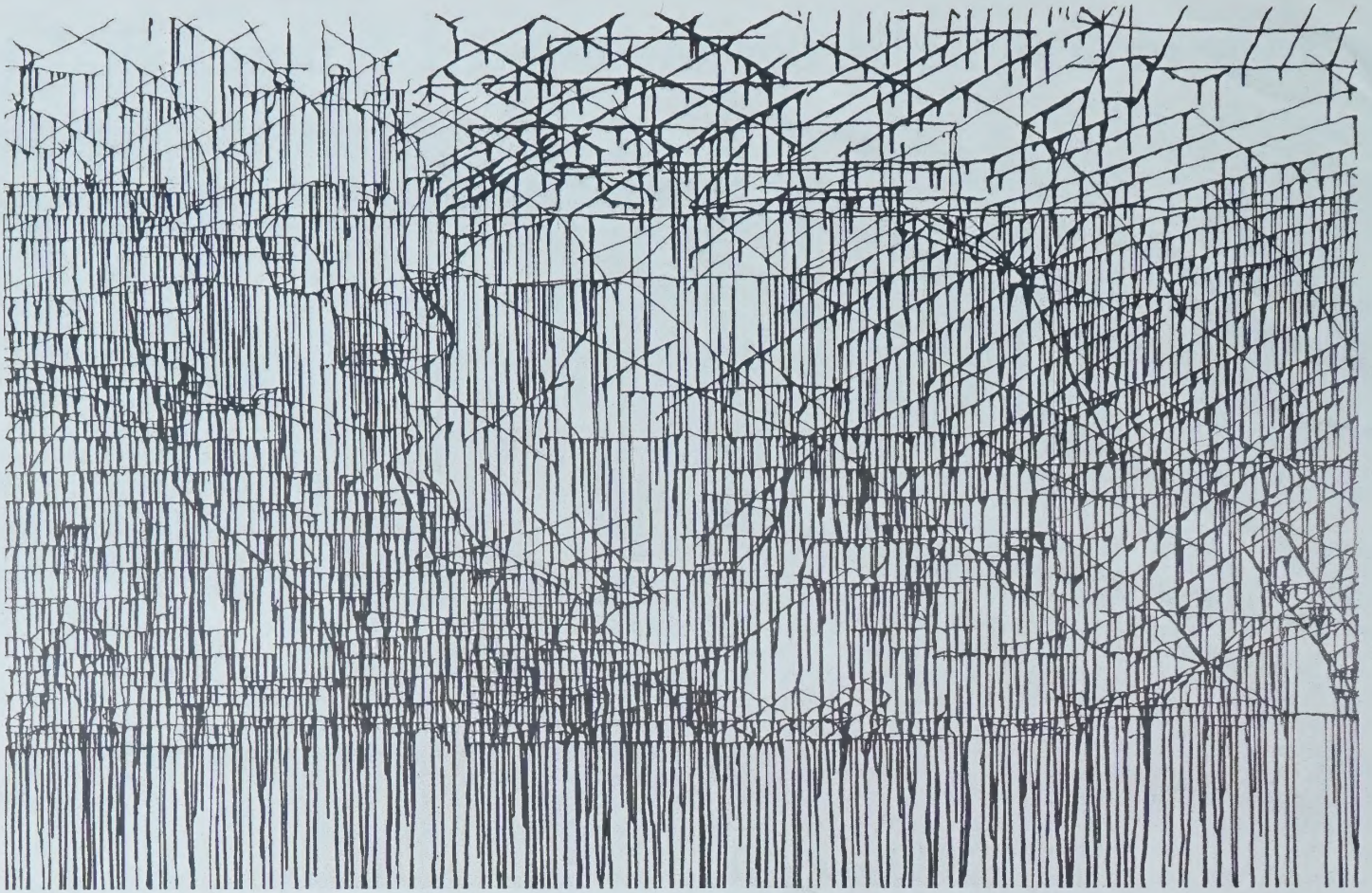
Alumni/Student Hockey game. Alumni/Faculty hockey players, bring the kids and family to our one-hour free family skate before the game takes place from 5–6 p.m. Please contact Lori Shockey if you are willing to play and what position you prefer along with the skill level you would consider yourself (1 being strong player and 5 being new to the game). To get on the roster, please email your name and information by March 10. Sign up early, as there are only 15 or so spots available. lori.shockey@ualberta.ca. Clare Drake Arena.

MARCH 23

Mainstage: From Tchaikovsky with love. \$20 available at yeglive.ca/ualbertamusic. 8–10 p.m. Winspear Centre.

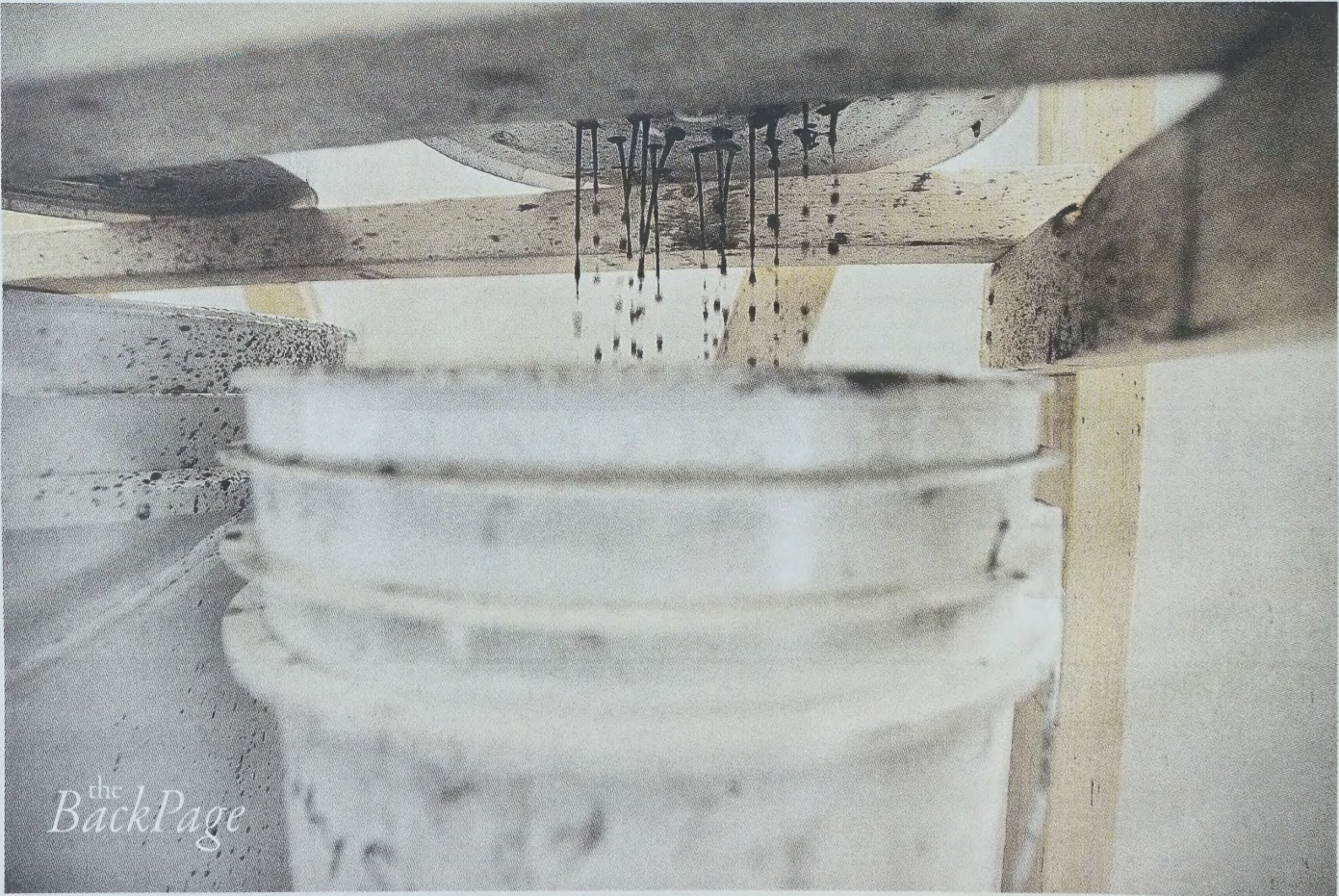
MARCH 28

Deadline for application for the position of chair of the Department of Biomedical Engineering. The chair will be responsible for a Department with seven full-time faculty, 38 adjunct faculty and 10 office and technical support staff. The Department supports very successful research programs, particularly in the fields of imaging and rehabilitation engineering, as well as involvement in undergraduate and graduate programs. More at www.biomed.engineering.ualberta.ca.



Experiments in Artistic Hydrology, a performance art project by fine arts master's student Aaron Veldstra, explores remediation and sustainability in the resource industry—a process that, like creating art, can generate waste byproducts. The inky lines syringed on the wall trace over geographical data sets—pipelines, roads, cut lines and power lines—displaying human incursion on Northern Alberta's boreal forest. When a section is finished, the lines are erased using baking soda and water. Waste water is then filtered through buckets of gravel and graded sand. The water is reused as many times as possible before it is returned to the city system. The drawing surface is then repainted and a new section of Alberta is traced and then erased.

LIKE OIL FOR
WATER



PHOTOS | RICHARD SIEMENS | MARKETING & COMMUNICATIONS